TRENDS



The State Health-Plan of South Carolina: 1990 - 1999

Volume 10, Issue 3 Fall 1999



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The 90's: A Decade To Remember

Delivering quality health insurance while controlling premium growth is becoming more of a challenge annually for health plans across the nation. The Office of Insurance Services (OIS) conducted a survey of other state employee plans and found that the monthly composite total premium for southern states' employee plans averaged \$312.56 for the 1999 benefit year. This average climbed 8.4 percent for year 2000 as the monthly composite total premium rose to \$338.91. The State Health Plan (SHP) also saw growth in its monthly composite total premium, which grew from \$248.18 in 1999 to \$267.34 for the benefit year 2000.

As premiums rose throughout the 90's for employee plans in many states, the SHP continued to maintain and enhance Plan benefits while minimizing premium growth. The Plan has initiated several network arrangements with health care providers, which improve the quality of services while assisting the Plan in cost minimizing. With the aid of implementing managed care approaches, Plan savings have risen throughout the decade.

Even with these efforts, cost growth continues to be a major concern of the SHP as the rate of payment growth is exceeding that of savings growth, indicating a decline in the marginal effectiveness of the Plan's savings strategies.

In this issue of TRENDS, claims and enrollment data from 1990 through 1999 have been analyzed to identify sector trends in costs, savings, and enrollment.



CLAIMS GROWTH

Plan Payments Up in the 90's

Plan payments are the amount the State Health Plan (SHP) pays for covered charges after deductible(s) and coinsurance requirements are met by insureds. Identifying past trends in payment growth provides valuable data for the future cost outlook of the Plan.

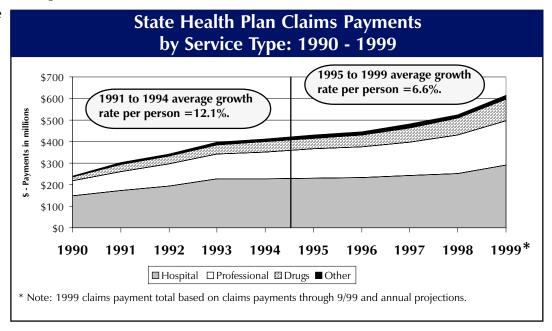
The SHP has not avoided the national trend towards higher health care costs. Health plans across the nation are facing

rapid growth in plan payments. Plan payments more than doubled from 1990 to 1998 while growing an average 9 percent annually. In 1990, Plan payments totaled \$250.9 million. Based upon current projections, Plan payments will top \$614.9 million for 1999, a 17 percent annual increase from \$525.7 million in 1998.

Two key contributing factors to these increases in Plan payments were new expensive treatments and the overall rising costs of prescription drugs.

Composition

As Plan payments rose throughout the decade, the composition of Plan payments changed as well. In 1990, 62 percent of Plan payments were paid for hospital charges. Although still the leading payment category, hospital payments accounted for a lesser 48



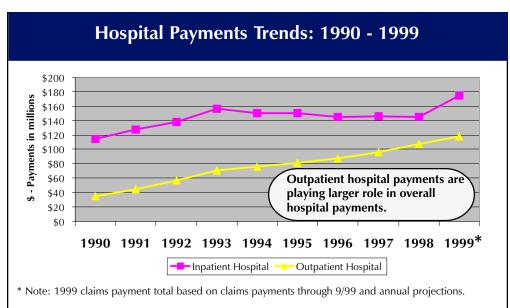
percent of 1998 Plan payments.

An analysis of each segment of plan payments indicated that the average annual growth rate in prescription drug payments of 23.6 percent exceeded that of professional (12.9 percent) and hospital (8 percent) payments from 1990 to 1999.

Hospital Payments

The inpatient hospital share of Plan payments declined annually through 1998, down 20 percent from 1990 when 47.6 percent of Plan payments were contributed to the category. However, the down-

See PLAN PAYMENTS on Page 3





Plan Payments

Continued from Page 2

ward trend is coming to an end as inpatient hospital payment projections for 1999 show a 20.6 percent increase from 1998. A total of \$144.8 million were paid for inpatient hospital expenses in 1998.

The impact of outpatient hospital payments on hospital payments continued to increase throughout the 90's. Outpatient hospital payments grew an average 14.8 percent annually throughout

the 90's. The category's payments totaled \$107.6 million in 1998. Many procedures, which in the past required an inpatient hospital stay, are now performed in an outpatient setting due to technological advances.

Professional Payments

Professional office payments led professional payment growth with a 17.5 percent annual average growth rate. Their share of total payments increased 6.5 percentage points from 10.6 percent in 1990 to 17.1 percent 1999.

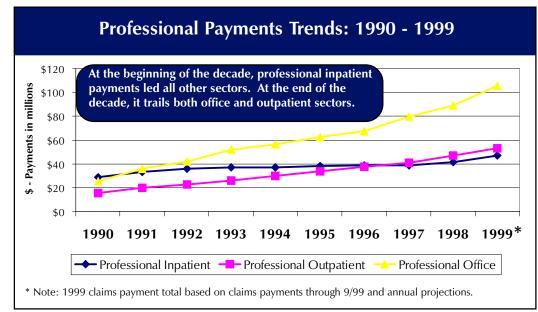
Professional outpatient payments share of total payments grew 2.3 percentage points from 1990 to 1999 at an annual average rate of 14.9 percent.

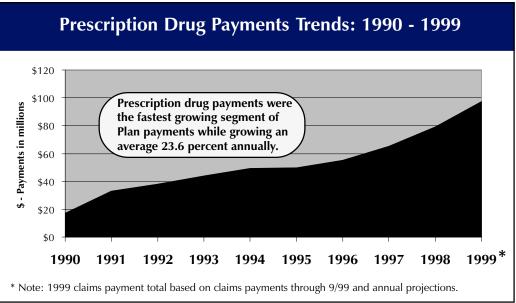
Inpatient professional payments share of total Plan payments declined from 12 percent in 1990 to 7.6 percent in 1999. After growing at an average rate of 4.8 percent annually from 1990 to 1998, inpatient professional payments projections indicate a 12.7 percent increase in 1999. The category totaled \$41.7 million in payments in 1998.

Prescription Drug Payments

Prescription drug payments were the fastest growing segment of Plan payments during the 90's. Prescription payments grew at an average rate of 16.7 percent from

1996 to 1998 and are projected to surpass that rate by growing 23 percent in 1999. Their share of Plan payments grew 8.7 percentage points from 7.1 percent of 1990 Plan payments to 15.8 percent of 1999 Plan payments. Behind this growth are the high prices associated with new drugs introduced over the last few years. Drug payments totaled \$79.2 million in 1998, more than double the \$38.1 million paid in 1992, and are projected to reach \$97.5 million in 1999.





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Inpatient Hospital Payment Growth

With inpatient hospital payments comprising the largest percentage of total plan payments, these payments were examined by major diagnostic categories (MDCs) from 1990 through 1999. For the purpose of this analysis, 1999 numbers were based upon the first three quarters of 1999 and annual projections.

Circulatory System Diseases & Disorders composed 21.1 percent of total inpatient hospital payments from 1990 to 1999. By the end of 1999, Circulatory System Diseases & Disorders payments are projected to increase to \$41.2 million from the \$20.6 million paid in 1990, at an average rate of 8.3 percent annually. Between 1990 and 1992, the category grew at an average annual rate of growth of 10.1 percent. The growth rate slowed significantly to an average 1.6 percent annually from 1996 to 1998. Circulatory System Diseases & Disorders hospital stays averaged

6.3 days per admittance from 1990 to 1998.

Myeloproliferative Diseases & Disorders, & Poorly Differentiated Neoplasms accounted for 11.9 percent of total inpatient hospital payments from 1990 to 1999. The average length of stay from 1990 to 1998 was 6.4 days. Between 1990 and 1992, the average annual growth rate was 21.4 percent. Myeloproliferative Diseases & Disorders, & Poorly Differentiated Neoplasms payments declined an average 9.7 percent annually in 1997 and 1998 before climbing a projected 42.1 percent in 1999. Overall, the MDC grew at an average rate of 8.5 percent annually from 1990 to 1999.

Highs and Lows

Congenital Anomalies inpatient hospital payments led growth from 1997 to 1998 and climbed an average of 14 percent annually since 1995. From 1990 to 1999, the *Congenital Anomalies* payment growth rate averaged 7.1 percent annually.

As each MDC's share of inpatient hospital payments changed, Circulatory System Diseases & Disorders gained the most out of the top five MDCs. In 1990, 18.1 percent of inpatient hospital payments were due to Circulatory System Diseases & Disorders. By 1999, that percentage had climbed to 23.6, a 5.5 percentage point increase.

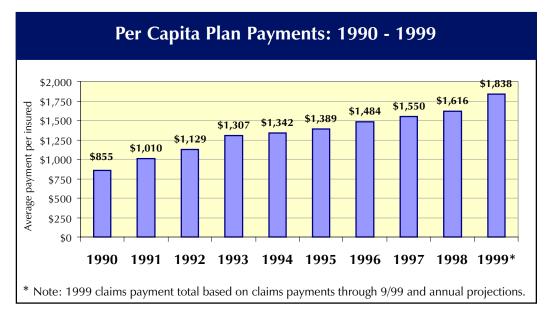
In terms of share of inpatient hospital payments, *Pregnancy, Childbirth & Puerperium* had the largest drop in inpatient hospital payment share from 1990 to 1999 after a 2.9 percentage point decline. In 1999, *Pregnancy, Childbirth & Puerperium* composed 6.3 percent of inpatient hospital payments, down from 9.2 percent in 1990.

Inpatient Hospital Payment Trends by Major Diagnositic Codes							
			1999	Annual	Average	Annual Growth	
	1990	1994	Projected	Average	Share	Average	
Infectious & Parisitic Diseases	\$2,354,787	\$2,931,790	\$3,121,374	\$3,202,952	2.2%	5.9%	
Neoplasms	\$11,968,703	\$16,574,989	\$22,508,432	\$17,142,923	11.9%	8.5%	
Endocrine, Nutri. & Metabolic	\$2,353,215	\$3,743,886	\$4,507,531	\$3,572,885	2.5%	8.2%	
Blood & Blood Forming Organ Diseases	\$966,162	\$2,977,996	\$2,032,341	\$1,886,567	1.3%	15.6%	
Mental Disorders	\$5,169,125	\$5,363,651	\$3,745,771	\$4,592,064	3.2%	-2.6%	
Nervous System & Sense Organ Diseases	\$2,101,630	\$2,608,965	\$2,706,758	\$2,353,835	1.6%	4.7%	
Circulatory System Diseases	\$20,639,749	\$30,348,490	\$41,193,394	\$30,431,442	21.1%	8.3%	
Respiratory System Diseases	\$6,433,663	\$9,532,068	\$11,837,185	\$8,963,396	6.2%	7.4%	
Digestive System Diseases	\$12,189,214	\$15,661,230	\$18,730,875	\$14,978,933	10.4%	5.4%	
Genitourinary System Diseases	\$9,402,784	\$10,406,874	\$9,343,779	\$9,698,436	6.7%	0.2%	
Pregnancy, Childbirth & Puerperium	\$10,553,575	\$11,135,835	\$11,030,454	\$10,283,650	7.1%	1.0%	
Skin and Subcutneous Tissue Diseases	\$1,171,405	\$1,527,887	\$1,359,475	\$1,337,615	0.9%	5.9%	
Musculoskeletalal System Diseases	\$5,789,089	\$8,653,546	\$10,647,424	\$8,364,253	5.8%	7.4%	
Congenital Anomalies	\$1,583,342	\$2,263,862	\$1,697,304	\$1,430,669	1.0%	7.1%	
Perinatal Period Conditions	\$1,334,993	\$2,407,816	\$770,647	\$1,661,171	1.1%	2.0%	
Symptoms, Sign & Ill Defined Condition	\$4,817,904	\$4,876,701	\$6,941,736	\$5,108,307	3.5%	5.3%	
Accidents, Poisoning & Violence	\$8,117,142	\$9,416,407	\$12,154,848	\$10,224,858	7.1%	5.7%	
Other	\$7,315,969	\$10,079,554	\$10,310,374	\$9,330,204	6.5%	4.8%	
Grand Total	\$114,262,451	\$150,511 <u>,</u> 547	\$174,639,701	\$141,222,433	100.0%	5.1%	



Per Capita Growth During The 90's

Along with total plan payments, the average plan payment per insured, or per capita payment, has continued to rise annually. Per capita payment is projected to reach \$1,838 for 1999 from \$855 in 1990. The increasing per capita payment, despite cost containment approaches, remains not only a concern of the State Health Plan but also of many other health plans nationwide.



Components to Per Capita Payment Growth

Since the primary components to per capita plan payments are total plan payments and total

insureds, their percentage growth rates from 1990 to 1999 were plotted to identify the effect each component had on per capita payment growth. The results indicated that per capita payments have been impacted more by plan

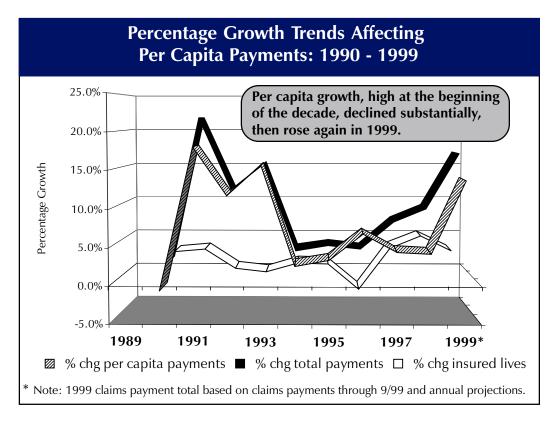
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payment growth than enrollment growth trends.

While total enrollment grew at an average rate of 1.8 percent from 1990 to 1999, Plan payments grew at an average rate of 9.8 percent annually, leading to an average

> annual per capita growth rate of 8.1 percent. As a result, the same factors driving up plan payments are driving per capita payment growth as well.

The Plan experienced the decade's highest percentage payment growth rates in the early 90's. Per capita plan payments rose 18.1 percent in 1991 behind a 21.8 percent increase in claims payments. By the mid-90's, the rates of payment growth lessened. However, growth rates have been moving upward since 1996. T



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COST SAVINGS & MANAGED CARE

Cost Savings Growing Throughout the 90's

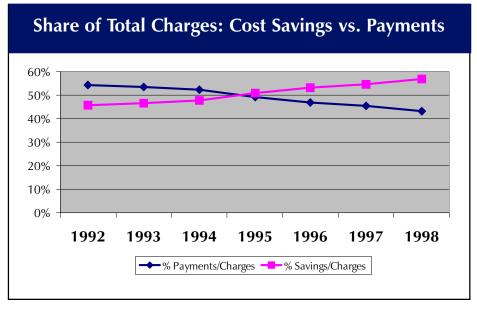
Cost savings have become increasingly important to the Plan as overall health care costs continue to rise annually. These savings are the result of managed care savings, cost sharing adjustments, fee reductions, contractual limitations, and other party liability.

The State Health Plan (SHP) has realized considerable cost savings throughout the 90's. Cost savings statistics from 1992 to 1998 indicated that overall cost savings increased an average 17.4 percent annually while claims payments increased an average 8.1 percent annually during the same period. In 1998, the Plan saved a total of \$696.8 million compared to \$289.6 million saved in 1992.

Since 1995, a larger percentage of total charges have been saved through cost savings than actually paid by the plan. In1998, 57 percent of total charges were saved through cost savings, up from 45.8 percent in 1992.

As provider networks were established, the Plan realized increased savings.

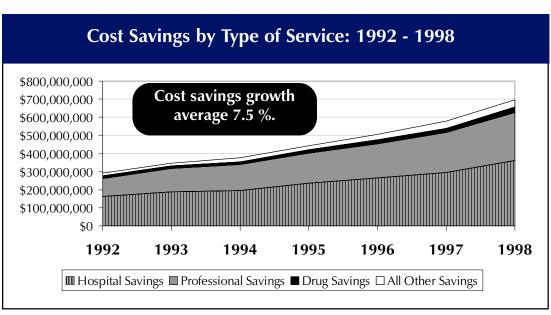
Hospital cost savings made up an average 52.8 percent of annual cost savings from 1992 to 1998 as they increased an average 16 percent annually. The majority of 1998 hospital cost savings (55 per-



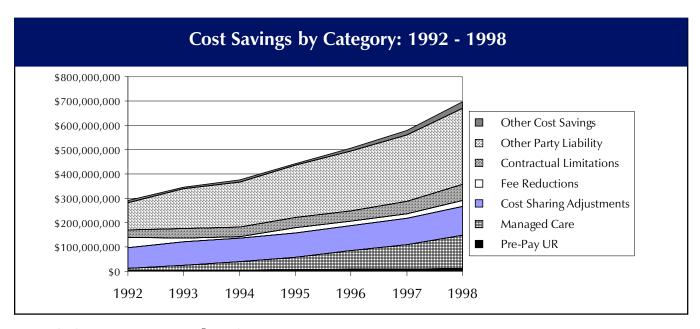
cent) was due to other party liability while 19 percent were due to managed care savings. Professional cost savings grew at a rate of 17.3 percent annually and composed an average 37.8 percent of total cost savings.

While prescription drug costs

continue to grow substantially, drug cost savings composed only an average 4.2 percent of total cost savings annually from 1992 to 1998. Drug cost savings increased at an average rate of 11.5 percent annually.







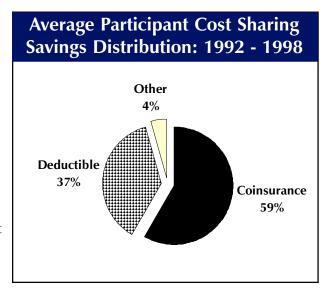
Participant Cost Sharing

Cost sharing adjustments are comprised mostly of insured coinsurance liability and deductibles. These adjustments averaged 23 percent of total Plan cost savings from 1992 to 1998. However, that percentage has continued to decline since 1992. While Plan charges have continued to climb, the Plan's deductibles and coinsurance levels have remained constant.

In 1992, coinsurance liability made up 60.1 percent of cost sharing adjustments. By 1998,

coinsurance liability comprised 61.9 percent of cost sharing adjustments.

During the same period, the percentage of cost sharing adjustments due to insured deductible liability declined from 38.1 percent in 1992 to 37.2 percent in 1998.



Coordination of Benefits

Coordination of benefits (COB) occurs when a subscriber is also covered under another group insurance program. In such cases, one group plan serves as the subscriber's primary carrier. The primary carrier then pays its covered expenses first. Any other carriers serve in a secondary capacity, paying the remaining portion of its covered limits.

The main contributor to COB savings in the 90's was Medicare.

Medicare is the primary carrier for retirees 65 and older (an average 14.2 percent of total subscribers) as well as for those approved by the Social Security Administration for disability retirement benefits. On average, Medicare COB savings composed 90.3 percent of COB savings from 1992 to 1998. Since 1992, Medicare's share of COB savings increased from 85.7 percent in 1992 to 92.9 percent in 1998, indicating that Medicare expenses

are growing faster than the Plan as a whole. In 1998, 41.8 percent of total 1998 cost savings were due to Medicare savings.

Other COB savings to the SHP made up an average of 10 percent of COB savings from 1992 to 1998. These savings were the result of group insurance plans (8.2 percent), subrogation (0.8 percent), workers' compensation (0.5 percent), and Medicaid (0.1 percent).

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The Move to Managed Care

Perhaps the most significant movement in the delivery of health care benefits in the last decade has been the rise of managed care approaches to health care. The term "managed care" represents an array of approaches to delivering quality health care while controlling costs.

Managed care approaches have risen over recent years in an effort to combat inflationary forces affecting health plan costs. In an article published in the October 4, 1999 edition of The State Newspaper, five factors were sited for the current growth in health costs: skyrocketing prescription drug costs, increased utilization, new technology and services, cost-shifting due to the federal Balanced Budget Act of 1997, and legislated mandated benefits coverage. As a result, health plans, including the State Health Plan, have placed more emphasis on cost savings.

Pricing Arrangements

Price arrangements with providers are utilized to combat inflation-

ary forces in health costs. The Plan successfully implemented several networkpricing arrangements to manage costs and improve the quality of services delivered

to insureds. Network participants and providers agree to accept the Plan's allowable charge as payment-in-full for services. In 1992, the Hospital Network was initiated. The SHP Physician Network began in 1993. The SHP Transplant Network was initiated in 1994 while the Prescription Drug Network began in 1995. These networks along with other managed care arrangements and agreements implemented during the 90's have played a major role in the Plan's cost containment efforts.

Managed Care Savings

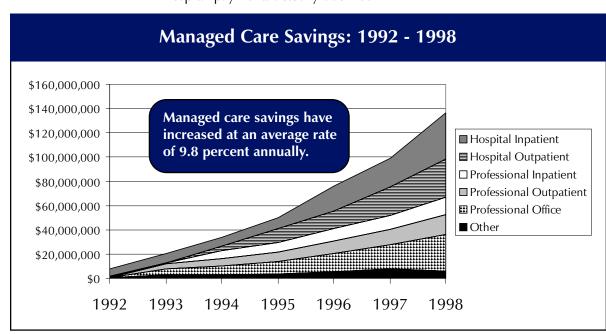
The leading category of managed care savings is inpatient hospital savings. In 1992, inpatient hospital savings comprised 77.6 percent of managed care savings. However, that percentage lessened to 28 percent in 1998. A total of \$38.2 million of 1998 managed care savings were due to inpatient hospital savings, a 62.2 percent increase from the previous year. As a result of the 1998 increase in inpatient hospital payments actually declined

0.5 percent in 1998.

Outpatient hospital savings made up an average 15.6 percent of annual managed care savings from 1992 through 1998. Their share of managed care savings has increased from 9.7 percent in 1993 to 23 percent of managed care savings in 1998. At the same time, outpatient hospital payments share of total payments has climbed from 16.7 percent in 1992 to 20.5 percent in 1998.

The plan realized \$30 million (22 percent) of managed care savings from professional office savings in 1998. As professional office payment growth has averaged 11.5 annually since 1994, professional office savings growth has average 43.1 percent.

The ability of managed care savings categories to contain costs varies. Overall, the impact of managed care savings on total charges continues to increase. In 1992, managed care savings saved the Plan only 1.3 percent of total charges. By 1998, managed care savings accounted for 11.2 percent of total charges.





HISTORICAL PERSPECTIVE

1990 - 1999: A Decade of Stability

The State Health Plan (SHP) maintained and enhanced quality health benefits throughout the 90's. In 1990, the Plan became a comprehensive benefits plan requiring coinsurance for services with reimbursements based on allowable charges. The out-of pocket maximum was \$1,500 for an individual and \$3,000 for the family. Since its implementation in 1990, no changes have been made to deductibles, coinsurance, or the out-of-pocket limit.

The following lists other key Plan enhancements during the 90's:

1990

- * The comprehensive plan's lifetime maximum was increased from \$500,000 to \$1 million.
- * Medi-Call, the Plan's utilization review program, became mandatory. The program makes sure that insureds receive the appropriate medical care in the most beneficial, cost-effective manner. Failure to notify Medi-Call leads to a \$200 penalty for each hospital or skilled nursing facility admission and removes the \$1,500 coinsurance maximum.

1991

* The Mammography Testing Program was expanded to fully pay for routine mammograms for female employees and retirees, and covered dependents of employees and retirees ages 35 through 74. Routine, four-view mammograms are covered at participating facilities at 100 percent once eligibility requirements are met.

1992

* The SHP established the

Hospital Network. Network hospitals agree to be paid for inpatient services based on an established DRG (Diagnostic Related Groupings) reimbursement schedule. Prior to 1992, the SHP paid hospitals based on hospital billed charges. Outpatient hospital services were added to the network pricing agreement in 1994. By the end of January 1992, all of the state's hospitals participated in the network.

* The Maternity Management Program was established. All expectant mothers are required to participate. They are assigned a maternity case management nurse to ensure that both mother and child receive quality prenatal care. The nurse may also follow up with the expectant mother's physician.

1993

* The SHP Physician Network is established. Participating physicians are reimbursed for their services based on the Plan's fee schedule allowable charge for the service and do not balance bill insureds. Prior to 1993, the Plan reimbursed physicians based on the 90th percentile of HIAA charge profiles.

1994

- * The SHP Ambulatory Surgical Center Network is established. Ambulatory surgical centers provide many of the same services provided at hospital outpatient departments. With the creation of this network, the SHP established reimbursement guidelines for outpatient services. The network operates the same as the SHP Hospital Network.
- * The SHP Transplant Network is established.

1995

The SHP Prescription Drug Program is created. The program consists of a network of pharmacies that have agreed to provide SHP subscribers' prescription drugs at discounted prices. Prior to the program, payments were based on retail charges. The program allows pharmacists to interact with the PAID Prescriptions data bank and allows subscribers the full benefits of discounts and drug information. A formulary feature, in which drugs are recommended due to their therapeutic value and cost-effectiveness, is included to help control drug costs.

1996

- * The Well Child Benefit is added to the SHP. Routine check-ups and immunizations for children through age 12 are covered at 100 percent without any deductible or coinsurance when provided by network physicians and according to the well child schedule.
- * The SHP Appeals Process is formalized in May as a result of legislation. The process provides covered person's a means of requesting a review of and reconsideration of a claim that has been denied in whole or in part, or that benefits will not be paid. Appeals are handled under the process of administrative law.

1998

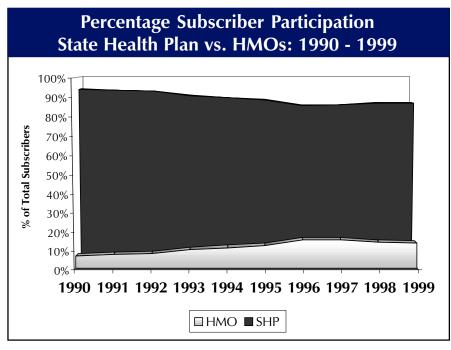
* Effective January 1, 1998, the Office of Insurance Services expanded its transplant contracting arrangements to include the Blue Cross and Blue Shield National Transplant Network which includes more than 50 institutions nationwide.

ENROLLMENT TRENDS

State Health Plan vs. HMOs

The number of eligible subscribers for health insurance continued to rise throughout the 90's at an average annual rate of 2.8 percent. Eligible subscribers may choose the State Health Plan or a health maintenance organization (HMO) offered for health coverage. In general, the vast majority of eligible subscribers enroll in the SHP.

As the subscriber count continued to rise during the 90's, HMOs expanded their share of total health subscribers. Throughout the decade, the overall share of subscribers choosing an HMO for coverage averaged 11.1 percent. In 1990, only 6.4 percent of eligible subscribers enrolled in an HMO plan. However, by 1996, HMO enrollment had more than doubled that percentage to 15.2 percent.



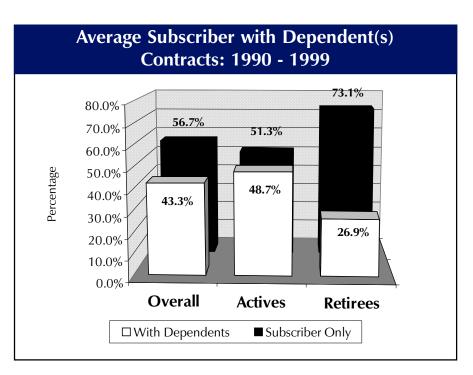
Since 1996, HMOs' share of total subscriber enrollment has declined as more subscribers have opted for the SHP. Two of the factors contributing to the increasing SHP subscriber share since 1996 are

the stability in SHP employee premium rates while HMO plan premiums continue to increase and continued benefit enhancements to the SHP.

Subscribers with Dependents

Premiums for the four tiers of coverage available under the Plan vary according to the subscriber's tier choice. The lowest employer and employee premium are paid for subscribers electing subscriberonly coverage while premium costs rise according to the type of dependent coverage elected.

Plan data shows that an average 43.3 percent of Plan subscribers from 1990 to 1999 covered dependents. On average, more active subscribers (48.7 percent) covered dependents than retirees (26.9 percent).



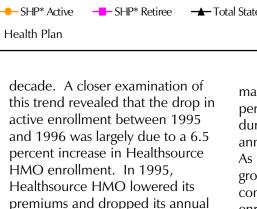


Retiree Growth Outpaces Active Growth

State Health Plan (SHP) enrollment increased at an average rate of 1.9 percent annually during the 90's. By 1999, enrollment had climbed 17.9 percent since 1990 as the rate of Retiree enrollment growth outpaced that of active subscribers. While active and retiree subscriber enrollment grew at similar rates in the early 90's, their growth rates varied more towards the end of the decade. Plan active enrollment rose 10.3 percent from 1990 to 1999, while retiree enrollment more than tripled the

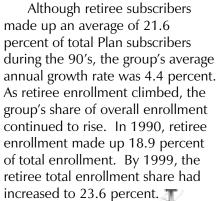
active growth rate by climbing 47.5 percent during the same time span.

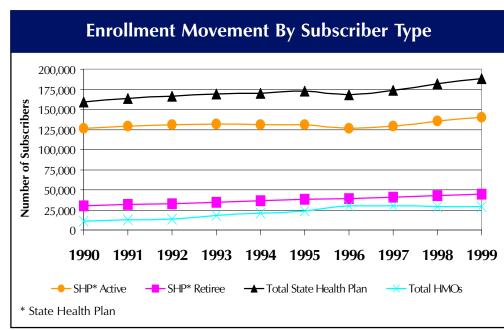
The Plan's active enrollment rose at an average rate of 1.1 percent annually from 1990 to 1999. During the 90's, active subscriber enrollment saw a downward trend in the mid-90's. By 1996, Plan active enrollment had declined 4 percent from 1995 to 125,911 subscribers, the lowest active subscriber count during the



deductibles, making the HMO more

appealing to active employees.

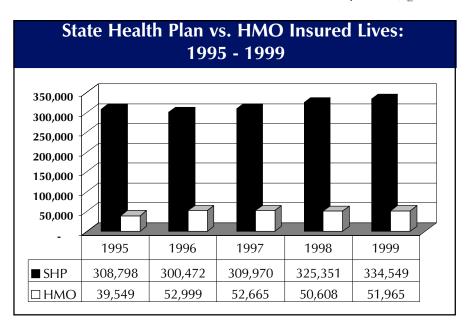




Insured Lives

The State Health Plan insured more lives annually than HMOs throughout the 90's. On average, the Plan composed 86.4 percent of insured lives from 1995 to 1999, an average 315,828 lives annually while HMOs insured on average 49,557 lives.

The number of lives insured by HMOs rose 34 percent from 1995 to 1996. Since then, the Plan's insured lives count has grown an average 3.7 percent annually while the HMO insured lives count has declined an average 0.6 percent annually.



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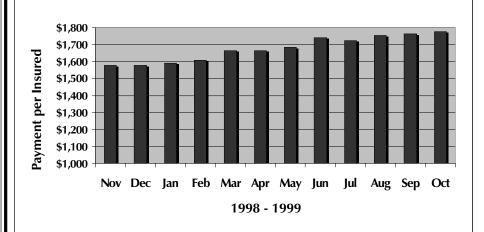
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Past Trends

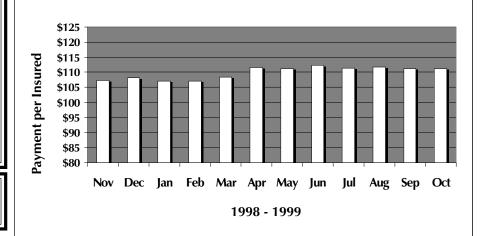
Medical Payments in Prior Year Ending in Month Listed

For example, the November total equals payments made November 1998 - October 1999.



Dental Payments in Prior Year Ending in Month Listed

For example, the November total equals payments made November 1998 - October 1999.



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